The Osbornes: Historical Documentation vs. "Critical Habitat" Dr. Bob Zybach [March 20, 2020 Final Draft]



Crater Lake and Wizard Island as viewed from The Watchman "Observation Station," July 23, 1933. Photograph by Lester Moe and Robert Snyder.

William B. "Bush" Osborne, Jr. was one of the most important and accomplished foresters in the US Forest Service during the 20th century, and ever. Following his graduation from Yale with a Master of Forestry degree in 1909, he got his first job on the Oregon (now Mount Hood) National Forest and continued working with the Forest Service until his retirement in 1945.

In that 35-year period Osborne invented and developed some of the most important concepts, standards, and tools that continue to typify and help define the Forest Service and forest fire fighting to this day.

During the years 1909 to 1910, Osborne conducted an extensive reconnaissance of the Mt. Hood and Santiam National Forests, followed by his drafting of the first detailed maps of a national forest. The year 1910 is well-known for the widespread catastrophic wildfires of that year. Osborne helped fight a number of these, and his familiarity with the Mt. Hood and Santiam peaks, forests, and vistas led him to strategically plan and install the first coordinated lookout stations in the Pacific Northwest.

The intended purpose of Osborne's maps was the location of wildfires from these viewpoints, but they were not accurate enough for his intentions. In 1911 and 1912 he did the "surveying, compilation, and drafting of the first trigonometrically controlled national forest map." This methodology and attention to detail soon became the standard practice for all national forests. It also typified Osborne's career-long insistence on "pin point accuracy."

To further increase the ability of seasonal lookouts to accurately locate fires, Osborne invented the "Oregon fire finder" in 1913: a precise instrument that worked in coordination with his maps. He made improvements to his invention in 1916 that became the standard for forest lookouts and was eventually known as the "Osborne Firefinder." By the time of his retirement in 1945, over 4,000 Firefinders were still in active use. Today these devices are collector's items, but modern versions continue to be used to this time as originally designed.

Less well-known than his Firefinder was Osborne's invention of the "photo recording transit" in the late 1920s. By 1933 his specially-designed and thoroughly tested camera/transit was ready for use, and during the next 10 years more than 1500 lookout stations in Oregon and Washington were using them.

The following pages contain several examples of Osborne photographs taken from western Oregon fire lookouts in the 1930s. The original prints are much larger -- about 14-inches by 4inches -- and all were taken in groups of three. These photos covered the entire 360-degrees of visible landscape, beginning with a due-north photo and proceeding southward, east to west, at 120-degree increments. The specially-designed camera used a curved negative surface so that there was no distortion on the outer edges of the photographs. These products can thus be described, without exaggeration, as highly detailed and accurate maps of specific forest vistas at particular points in time.

1936-1937 Lincoln County "Critical Habitat"

Lincoln County is the birthplace of identifying marbled murrelets as an endangered Oregon species, beginning with the discovery of a fledgling in a Siletz grocery store parking lot in 1977. Subsequent research resulted in discovery of a nest with a single egg in a "300-year-old" Douglas fir tree, leading to immediate speculation that these birds required "old-growth" conifer trees for their survival.

Most of the forested lands and prairies of Lincoln County burned in the 1849 Yaquina Fire, and burned again in 1868. The "old-growth" Douglas fir turned out to be a relatively-young, though large, 100-year-old second-growth. The vast majority of these birds live in Alaska and do not nest in trees. They can fly 60 to 90 miles an hour and spend their entire life – except nesting for one month a year some years – in the ocean eating fish. The idea they require big, old conifer trees to exist is nonsense. There is a big difference between "preferred" habitat and "critical" habitat in the dictionary.

In 1992 the "big lie" was promoted by the federal government that nearly 90% of the Oregon Coast Range had been clearcut, beginning in 1850. The imaginary widespread logging had supposedly resulted in a 60% to 80% reduction in the Oregon marbled murrelet population, with no information to support that assertion. Because no such information existed.

This fabrication, repeated at the highest levels of the federal bureaucracy, resulted in a 1992 "finding" that the so-called Oregon population of this bird was "threatened or endangered"



Map of Lincoln County 1930s Osborne Forest Fire Lookouts (Red), 1940s WW II Lookouts (Black), and representative logging operation fire lookouts (Blue), on base 1951 Metsker Map. Zybach 20200320 Osbornes Final Draft

because of logging. This manufactured story was largely responsible for the listing of the bird and has resulted in a lucrative cottage industry for a handful of lawyers, college professors, and agency employees. The cost to taxpayers has been billions of dollars, the loss of tens of thousands of blue-collar jobs, and the degradation of dozens or hundreds of timber-producing rural communities.

Despite the easily-disproven nature of these assertions, they have continued to be repeated as if fact for decades; the most recent instance being a Portland Audubon website focused on "Oregon's" marbled murrelets two years ago.

Marbled murrelets are not dependent on "old-growth" – or even big conifer trees – for their survival. The statements regarding logging history of the Coast Range are not true and easily disproven. There is no information – one way or another – regarding populations of Oregon marbled murrelets prior to 1992. None. They may have even migrated here, much like barred hoot owls in recent years; possibly following the reestablishment of coastal forests following the "Great Fires" of 1840 through 1951. Or maybe not.

Most marbled murrelets are based in Alaska and there is no substantive evidence that logging (or burning) coastal forestlands has had any effect on their existence.

The Lincoln County map of historic forest fire lookouts uses a 1951 "Metsker" county index map showing the page numbers of the larger-scaled maps included in the atlas. Typically, individual Metsker maps are made up of a single square 23,000-acre "township" of 36 square-miles. These maps are highly detailed -- including most landmark names, major landowners, roads, trails, and structures within the township -- and are excellent resources to help interpret historical Osborne and aerial photos for similar time periods.

South Beaver Lookout

At least six sets of Osborne photographs were taken in Lincoln County from 1934 to 1937. The South Beaver Lookout was the westernmost location of these photos and Chinquapin Point Lookout was the easternmost. Between these two landscapes, and extending eastward to Benton County, is the greatest known and most studied concentration of breeding marbled murrelets in Oregon.

The May 29, 1937 northern view from South Beaver is bounded by the Pacific Ocean on the northwest and Alsea Bay to the northeast. The landscape is typified by a few young Douglas fir trees in the foreground and a likely plantation of similar-age Douglas fir in the middle distance, as indicated by the linear boundaries and apparent uniformity in size and spacing. No old-growth trees or snags are apparent. Note the road and fenceline for scale.

To the east, looking toward Table Mountain, is a sea of alder with a patch of Douglas fir in the distance to the southeast, and scattered second-growth Douglas fir beginning to emerge through the alder canopy. A few scattered snags and older-appearing fir can be spotted. To the west,



Northern View from South Beaver L.O., with Pacific Ocean and Alsea Bay along horizon.



Western View from South Beaver L.O., with Pacific Ocean and Highway 101 on horizon.

extending to the ocean and Highway 101 is a similar landscape: a vista of flowing alder with young fir emerging above the canopy here and there. No apparent "critical habitat" for marbled murrelets.

Chinquapin Point Lookout

The September 16, 1936 view north from the Chinquapin Point Lookout was dominated by young Douglas fir trees and evidence of older prairies and meadows. This pattern is more pronounced looking eastward toward Marys Peak. Here we see the remnants of old Indian prairies, often dominated by edible brackenfern.

These prairies were subsequently maintained by white settlers, who continued to seasonally burn them in order to regularly restore high-grade grazing areas for horses, cattle, and the local mohair goat industry. Rural western Oregon settlers who maintained these old prairies and meadows in the style of their Indian forebears, were called "fern burners." Osborne considered this practice as "the greatest enemy of reforestation in the Douglas fir region."

A major function of early lookouts was spotting and stopping fern burners. A Chinquapin Point lookout once spotted a fern fire by one of his neighbors and went to put it out. When he returned, the tires on his Forest Service vehicle had been flattened. Keep Oregon Green was created a few years later with "Don't Burn Fern" as their slogan.

The westward view from Chinquapin Point also consisted of young fir and scattered meadows, but with occasional snags and a few older, larger trees in evidence. This is the heart (western slopes and foothills of Lincoln County to Marys Peak) of so-called "critical habitat" for marbled murrelets today.

1937-1981 Linn County "Critical Habitat"

Although marbled murrelets have likely visited and flown through Linn County, there is no record of their nesting there. Rather, the "critical habitat" regulations that resulted in greatly reduced logging and reforestation schedules for these forests was related to spotted owls.

To "maintain the population" of these birds, a series of perfect cookie-cutter circles were drawn across the map -- with a focus on enclosing older and larger trees and a specific stated intent of stopping active management in those areas. There is no scientific or otherwise documented evidence that this strategy – which has also cost Oregonians billions of dollars, the loss of thousands of family-support, blue-collar jobs, and dozens of economically damaged rural communities – has resulted in the sparing of a single owl.

Instead, the federal government is spending tens of millions of taxpayer dollars to have employees hunt barred hoot owls because they are breeding with their spotted cousins. The apparent concern seems to be they might be producing viable young. It is a racial purity problem in any instance.



Northern View from Chinquapin L.O., showing young Douglas Fir trees and open meadows.



Eastern View from Chinquapin L.O., with Marys Peak, Indian prairies, fencing, and pruning.



Western View from Chinquapin L.O., with Table Mountain, meadows, and scattered older trees.

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Map of Linn County 1930s Osborne Forest Fire Lookouts showing concentration in Willamette National Forest in western Cascades; none in eastern Willamette Valley farmlands, on base 1938 Metsker Map.

As clearly predicted, the practice of eliminating active management of our public forests has resulted in ever greater and more severe forest wildfires. Black-backed woodpecker "critical habitat."

The 1938 Metsker Linn County base map shows the lack of lookouts for low-lying farmlands in western Linn County, on the eastside of the agricultural Willamette Valley, and numerous lookouts to the east, on the western forested slopes of the Cascade Mountains. This is spotted owl country. The Kinney Ridge Lookout is to the north of Linn County, overlooking the North Santiam River (currently Detroit Reservoir), and Jumpoff Joe Mountain Lookout is in southern Linn County, overlooking the South Santiam River.

Kinney Ridge Lookout

The June 4, 1937 view north from Kinney Ridge Lookout was downstream, through the burned and partially logged North Santiam River Canyon toward the present-day location of Detroit Dam. The North Santiam Highway (present-day Highway 22) can be seen in its original location before it was moved to accommodate the new reservoir in 1953. A significant number of snags can be seen on the unlogged lands, but most appear to be from second-growth trees.

The eastern view from Kinney Ridge shows a number of fire-killed second-growth and understory trees in the foreground. Upstream, in the distance, is the original site of the town of Detroit. The canyon is now a major reservoir and Detroit has been moved to a different Zybach 20200320 Osbornes Final Draft



Northern View from Kinney Ridge L.O. with Burned and Logged North Santiam River Canyon.



Eastern View from Kinney Ridge L.O. with North Santiam River Canyon, Detroit, and Burned Timber.



Western View from Kinney Ridge L.O. with Burned 2nd-Growth and Conifer Saplings.

location. The western vista also shows a number of small, densely distributed snags with an emerging understory of young Douglas fir.

Wildlife populations have had to adapt to these greatly changed conditions for many decades, as is typical throughout most of western Oregon and the Pacific Northwest.

Jumpoff Joe Mountain Lookout

The July 16, 1937 view east from Jumpoff Joe Mountain Lookout showed an extensive logging operation coupled with a large burn characterized by relatively small-diameter snags and emerging Douglas fir saplings. This is the Sevenmile Creek drainage with significant stands of older trees sprinkled with snags to the east on Browder Ridge and to the southeast on Latiwi Mountain.

The 1944 aerial photo of Jumpoff Joe Mountain clearly shows this same Sevenmile Creek clearing. By 1981 the basin had fully reforested, but significant clearcut logging had extended outward on Browder Ridge and south toward Latiwi Mountain.

In the 1890s this was considered one of the best deer and elk hunting areas by Indians from Warm Spring Reservation, who hunted here by horseback. Major huckleberry fields, thimbleberry patches, camas meadows, and beargrass prairies in the immediate neighborhood indicate that this had likely been a major gathering and harvesting area for regional Indian families for hundreds or thousands of years before the arrival of horses.

Summary & Conclusions

W. B. "Bush" Osborne left an incredibly accurate and detailed history of our federal forests in the Pacific Northwest, and yet this information is unknown, ignored, or trivialized by federal regulators, lawyers, and university professors. Apparently because it contradicts and otherwise fails to support their lucrative taxpayer-funded computer models and legal filings.

This argument has been made in these pages many times before. Federal forest management regulations, based on computerized modeling, do not match the dynamic and well-documented histories of Oregon's forests and streams. Also, the draconian costs of clearly failed "critical habitat" designations continue to need legitimate scientific examination and economic analysis.

True science rises to the challenge. Good modelers use documentation to test their theories. There is great need for better understanding of actual forest habitat conditions and species adaptability for a wide variety of animals, including migrating fish and birds.



1933 Eastern View from Jumpoff Joe Mountain toward Squaw ("Latiwi") Mountain in southeast.



1944 Aerial Photo of Jumpoff Joe Mountain.

1981Aerial Photo of Jumpoff Joe Mountain.